REMARKS/ARGUMENTS

1. Claims 1-2, 4-8, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou et al. (US 2005/0057716) in view of Wang et al. (US 2004/0263767) further in view of Nakahara et al. (US 2002/0033926).

Response:

Claim 1 has been amended to overcome the above rejection. Specifically, claim 1 now includes an additional amendment regarding "removing a sealant outside a liquid crystal injection area **before providing a first pressure**" All of the limitation of claim 3 is included in the amended claim 1. Such amendment is fully supported by the specification paragraph [0014]. No new matter is introduced by the amendment.

Hou discloses a liquid crystal display device and method of manufacturing rework. As schematically illustrated in Figs. 7-9, a subsequent cutting is performed directly cutting through the channel mouth of the discharge port 313 when an individual LCD cell such as cell 310 shown in Fig. 8 can be processed which is subject to the problem of having excessive liquid crystal sealed in its containing space (paragraph [0046]). The opening of the discharge port 313 can be achieved by breaking open the section of the sealing member 311 ***in between*** the two port-defining sections 313a and 313b (paragraph [0047]). As the examiner indicated, **Hou fails to teach removing a sealing member 311 *outside* the discharge port 313 before providing a first pressure**". Furthermore, **Hou also fails to teach providing any pressure before and/or during removing the sealing member 311 in the LCD discharge port 313.** Although Hou

teaches that an external pressure may be employed to discharge the excess of liquid crystal in the containing space (paragraph [0068]) and a plugging sealant 314 is utilized to seal the discharge port 313 after removing all excessive liquid crystal off the cell to achieve an LCD cell assembly 310 as shown in Fig. 9 (paragraph [0049]- [0050]), **Hou fails to teach providing any pressure during sealing the discharge port 313 with the plugging sealant 314** as the examiner pointed.

Wang discloses a LCD having a concave substrate and manufacturing method thereof. As shown in Figs. 1-2, an adhesive 130 is applied onto one of the substrates 100 and 110 in a peripheral region of an inner surfaces 100a and 110a thereof. After the LC material is dropped onto the other substrate, the substrate 100 and 110 are placed in a chamber 200 (paragraph [0017]). After the LC material is spread to fill the space between the two substrates 100 and 110, the air pressure in the chamber is increased. It is noted that increasing the air pressure in the chamber 200 creates a pressing force against the out surfaces 100b, 110b of the substrates such that each of the substrates 100, 110 is concave toward the other substrate (see Fig. 2) thereby obtaining a finished LCD (paragraph [0018]). Specifically, *increasing air pressure in the chamber also force the excess LC material out of the opening. Furthermore, the sealing resin will be sucked into the opening of the LCD when the chamber is brought back to atmospheric pressure* (paragraph [0005]). Please note that Wong teaches a method to manufacture LCD having a concave substrate, Wong has never disclosed **removing the adhesive 130 outside and/or in a discharge port before providing a first pressure**". Furthermore, **Wang also fails to teach providing any pressure before and/or during removing the adhesive 130 in the LCD discharge port.**

Nakahara discloses a manufacturing method of LCD. Please refer to Figs. 3-5 and Fig. 7. As shown in Figs. 3(a) and 3(b), after each rectangular panel 40 is filled with liquid crystal 42, the rectangular panel 40 is compressed by the pressure P to be regulated(step S20). In this state, an uncured end-sealing material 50 formed of UV radiation-curing type resin is applied to the liquid crystal injection port 40a (Step S21) (paragraph [0050]). Next, as shown in Fig. 3(c), the pressure P is reduced to obtain about one half the pressure Q (Step S22) and a part 50a of the applied end-sealing material 50 is drawn into the liquid crystal injection ports 40a to reliably seal the liquid crystal injection ports 40a (paragraph [0052]). Next, as shown in Fig. 3(d), the bleeding portion of the end-sealing material 50 on the end face of the rectangular panel 40 is removed (Step S23) (paragraph [0055]) and the end-sealing material 50 is irradiated with the UV radiation and allowed to cure with the rectangular panel 40 compressed under the pressure Q (Step S24) (paragraph [0061]). **Please note the Nakahara's method is used to remove excessive end-sealing material 50, Nakahara never teaches or suggests remove excessive liquid crystal 42 with pressure P or pressure Q.** The applicant argues that there is a lack of motivation to make this combination.

In summary, Hou fails to teach:

(a) removing the sealing member 311 outside the discharge port 313 before providing a first pressure;

(b) continuously providing the first pressure to two opposite surfaces of the liquid crystal display panel;

(c) continuously providing a second pressure to two opposite surfaces of the liquid crystal display panel, and removing the sealing member 311 in

the discharge port 313;

(d) sealing the liquid crystal injection area with plugging sealant 314 and continuously providing a fourth pressure to two opposite surfaces of the liquid crystal display panel.

Wang fails to teach:

(a) removing the adhesive 130 outside the discharge port before providing a first pressure;

(b) continuously providing the first pressure to two opposite surfaces of the liquid crystal display panel;

(c) continuously providing a second pressure to two opposite surfaces of the liquid crystal display panel, and removing the adhesive 130 in the discharge port.

Nakahara fails to teach:

(a) removing the end-sealing material 50 outside the liquid crystal injection port 40a before providing a first pressure;

(b) continuously providing the first pressure to two opposite surfaces of the liquid crystal display panel;

(c) continuously providing a second pressure to two opposite surfaces of the liquid crystal display panel, and removing the end-sealing material 50 in the liquid crystal injection port 40a;

(d) continuously providing a third pressure to two opposite surfaces of the liquid crystal display panel to press liquid crystal 42 out through the liquid crystal injection port 40a, and cleaning the pressed-out liquid crystal 42.

(e) sealing the liquid crystal injection area with a fresh sealant and continuously providing a fourth pressure to two opposite surfaces of the liquid crystal display panel.

The applicant argues that the combination of prior art references not only lacks fair motivation but also is distinctly different from the present application. Therefore reconsideration of the amended claim 1 is respectfully requested.

Claims 2, 4-8, and 12-13 are dependent on claim 1 and should be allowed if the amended claim 1 is allowed. Reconsideration of claims 2, 4-8, and 12-13 is politely requested.

2. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou et al. (US 2005/0057716),Wang et al. (US 2004/0263767) and Nakahara et al. (US 2002/0033926) in view of Sasaki et al. (US 7086175).

Response:

Claims 9-11 are dependent on claim 1 and should be allowed if the amended claim 1 is allowed. Therefore reconsideration of claims 9-11 is politely requested.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,

Winston Hsu Date: 03/22/2007

Winston Hsu, Patent Agent No. 41,526
P.O. BOX 506, Merrifield, VA 22116, U.S.A.
Voice Mail: 302-729-1562
Facsimile: 806-498-6673
e-mail : winstonhsu@naipo.com

Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)